Speaking and Swallowing Valve

Passy-Muir Valve Utilization and Maintenance

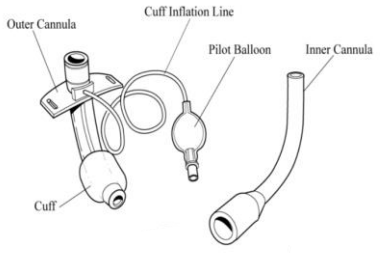
General Statement of Purpose

- The purpose of this competency is to provide a guideline for healthcare providers who will be involved in the use of tracheostomy speaking and swallowing valves.
- The SLP and RT will coordinate and complete the initial evaluation; however, the medical team including nursing staff and therapists will provide placement for daily use with a physician's order.

Why use a PMV?

- #1 reason for malpractice lawsuits --- "FAILURE TO COMMUNICATE."
  Huntington, B., Kuhn, N. (2003).
- Right to Communicate – ADA 2014 --- "Effective communication is particularly critical in health care settings where miscommunication may lead to misdiagnosis and improper or delayed medical treatment"
  U.S. Department of Justice, Civil Rights Division, Disability Rights Section, (2014).
- "Difficulty communicating with health care practitioners remains a significant barrier for patients seeking pain relief."
  Lineaw, S.S., Katz, P. (2006).
- An average person lip reading: "Word recognition accuracy scores were barely greater than 10% correct."
  Altieri, N., Pisoni, B., Townsend, J., (2011).
- "The addition of a post-tracheostomy care bundle to a multidisciplinary tracheostomy service significantly improved rates of decannulation and tolerance of oral diet."
  (Mah, JW, et al 2017)

Components of a Trach

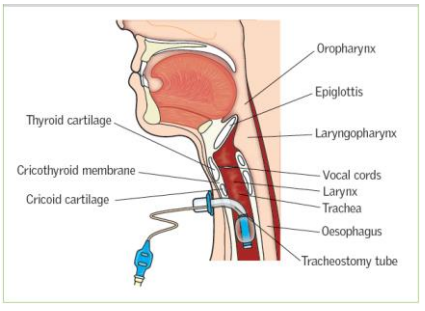


Types of Trachs @ HMSTC

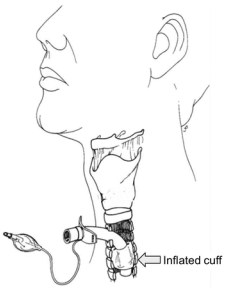
Shiley

Bivona

Anatomy with a Trach



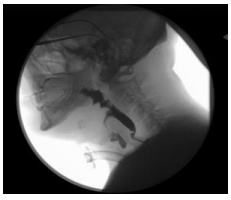
Anatomy with a Trach



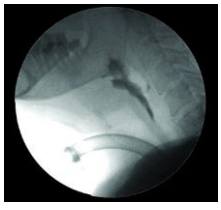
Benefits of Use

- Improved communication and quality of life
- Improved secretion management
- Improved taste and smell
- Improved cough production
- Improved respiration
- Improved intrathoracic pressure
- Improved balance
- Improved swallow function
- Reduced anxiety
- Reduced decannulation time

Why use while eating?



MBS without PMV



MBS with PMV

*PMV use restores sensation, subglottic pressure and cough response

Carmona, A.F., Arias Díaz, M., Aguilar Alonso, E., Macías Guarasa, I., Martínez López, P., and Díaz Castellanos, M.A. (2015).

Contraindications for staff use

- Medically unstable/medical hold
- Severe tracheal stenosis
- Unconscious/comatose/vegetative state
- Oral intubation
- Severe laryngeal narrowing
- Unmanageable, thick secretions
- Metal tracheostomy tubes (Jackson)
- Foam filled tracheostomy tubes (Bivona)
- **DO NOT USE DURING SLEEP**

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Capping Trials

- A red cap will be placed on the tracheostomy tube hub, by the RT with a physician's order, in the last step before the trach is completely removed
- A PMV is not needed during this time for the patient to speak efficiently and/or eat safely

Who is appropriate for use?

All patient's who have been assessed and cleared by SLP and/or RT. The patient must be:

- awake/alert
- display intent to communicate
- medically stable
- have a tracheostomy tube
- use to speak, eat and exercise

Procedure for Placement

1. Ensure patient has been evaluated and cleared by SLP and RT
2. **Ensure cuff is deflated**
3. Ensure proper body positioning
4. With gloves on, place two fingers on the outer cannula to hold trach in place
5. Place PMV on the hub with a twist to the RIGHT
6. Do not force the PMV on, it will be difficult to remove
7. Note the time PMV was placed

Procedure for Removal

1. With gloves on, place two fingers on the outer cannula to hold trach in place
2. Remove the PMV with a twist to the RIGHT
3. Ensure PMV is clear of secretions
4. If dirty, clean and dry properly
5. Place PMV back in storage container
6. Note total wear time and document accordingly

STOP Criteria

- Increased patient anxiety
- Increased work of breathing
- Increased heart rate of >20 beats/min from baseline
- Respiratory rate increases >35 breaths/min from baseline
- Violent/persistent coughing

Placing and Removing

Practice with Pocket TOM

Troubleshooting

- **Ensure cuff is fully deflated**
- Reposition patient
- Assess the need for oral and/or tracheal suctioning
- Consider anxiety level of the patient
- Seek SLP and/or RT to assist for further recommendations

Cleaning and Maintenance

- Valve should be cleaned as needed
- Wash with soap and water
- Rinse thoroughly with warm water
- Allow to dry completely before placing in storage container
- **DO NOT USE** hot water, peroxide, bleach, antibacterial gel, brushes or Q-tips
- Single patient use
- Good for use up to a maximum of 2 months

Inline PMV Placement

- Speaking and swallowing valves can be used with mechanical ventilation with the assistance of SLP and/or RT, with a physician's order
- Supervision is required at all times
- Vent alarms cannot be disabled

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Questions?

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